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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/851,056	05/08/2001	Keith L. Eichhorn	2643-33B	2891

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EXAMINER	
GOFF II, JOHN L	

ART UNIT	PAPER NUMBER
1733	4

DATE MAILED: 11/27/2002

Please find below and/or attached an Office communication concerning this application or proceeding.

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Office Action Summary	Application No. 09/851,056	Applicant(s) EICHHORN, KEITH L.	
	Examiner John L. Goff	Art Unit 1733	

-- The MAILING DATE of this communication appears on the cover sheet with the correspond nce address --

Peri d for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *08 May 2001* .

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *15-19* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *15-19* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *08 May 2001* is/are: a)☒ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

11)☐ The proposed drawing correction filed on _____ is: a)☐ approved b)☐ disapproved by the Examiner.

If approved, corrected drawings are required in reply to this Office action.

12)☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

13)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____ .

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

14)☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).

a) ☐ The translation of the foreign language provisional application has been received.

15)☒ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) *3* .
4) ☐ Interview Summary (PTO-413) Paper No(s). _____ .
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: .

DETAILED ACTION

Claim Rejections - 35 USC § 112

1. The following is a quotation of the second paragraph of 35 U.S.C. 112:

> The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

2. Claims 15-19 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

3. In claim 15, the phrase "raised bead of air-curable acrylic resin" is unclear and confusing. It is uncertain what is meant by the word "raised". It appears the application of a bead of air-curable resin to a glass window reads on a "raised" bead, as the applied bead would have a given height. This issue should be clarified and reworded as appropriate.

4. The term "about" in claims 16-19 is a relative term which renders the claims indefinite. The term "about" is not defined by the claims, the specification does not provide a standard for ascertaining the requisite degree, and one of ordinary skill in the art would not be reasonably apprised of the scope of the invention. It is unclear as to what tolerance "about" adds to the claims.

Claim Rejections - 35 USC § 103

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are

such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

6. Claims 15-19 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kamen et al. (EP 626354) in view of Kume et al. (U.S. Patent 5,578,365).

Kamen et al. are directed to a method for applying a decorative coating to a glass substrate. Kamen et al. teach a method comprising applying an ink in a prescribed pattern to the substrate, curing the adhesive ink, and applying a foil with a decorative metal film to the ink pattern at an elevated temperature sufficient to bond the film to the ink (Page 2, lines 32-37). Kamen et al. teach using an ink comprising acrylic resins (Page 2, lines 53-55).

Regarding claim 15, Kamen et al. are silent as to applying the ink using an X-Y plotter and curing the ink using air. Computer-driven plotters such as X-Y plotters are well known in the art for applying ink in a prescribed pattern as shown for example by Kume et al. One of ordinary skill in the art at the time the invention was made would have readily appreciated applying the ink taught by Kamen et al. in a prescribed pattern using an X-Y plotter as was well known in the art as shown for example by Kume et al. as only the expected results would be achieved. Kamen et al. suggest curing the ink in whatever manner is appropriate (Page 3, lines 24-25). The technique of curing acrylic inks at ambient conditions is well known and conventional in the art. Absent any unexpected results one of ordinary skill in the art at the time the invention was made would have readily appreciated air curing the acrylic ink.

Kume et al. are directed to a process for applying ink to a substrate to form a label. Kume et al. teach applying the ink using computer-driven printers such as X-Y plotters, ink jet printers, etc. (Column 8, lines 30-36).

Regarding claim 16, Kamen et al. are silent as to a specific teaching on the dimensions of the applied ink. However, the dimensions of the applied ink depend on the product made. One of ordinary skill in the art would be readily expected to determine the dimensions (height and width) of the applied ink without requiring any undue experimentation.

Regarding claim 17, Kamen et al. are silent as to a specific teaching on the hardness of the ink prior to applying the foil. However, one of ordinary skill in the art at the time the invention was made would have readily appreciated curing the ink to at least a tacky hardness (hardness greater than 65% on a 0-100% durometer scale) prior to applying the foil to ensure the ink does not move/deform during application of the foil.

Regarding claims 18 and 19, Kamen et al. teach applying the foil with a decorative metal film to the ink pattern at a temperature greater than 250 °F (Page 3, lines 30-33).

7. Claims 15-19 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hirahara (U.S. Patent 4,053,344) in view of Kamen et al. (EP 626354) and Kume et al. (U.S. Patent 5,578,365).

Hirahara is directed to a process for printing a prescribed pattern on a non-paper material. Hirahara teaches a flat or round substrate made of glass, metal, etc. (Column 2, lines 28-31). Hirahara teaches printing an ink in a prescribed pattern on the substrate, air curing the ink until it is tacky, and applying a stamping foil with a printing onto the ink pattern at an elevated temperature sufficient to bond the printing to the ink (Column 1, lines 53-54 and Column 2, lines 1-19 and 25-27).

Regarding claim 15, Hirahara is silent as to applying the ink using an X-Y plotter and using an ink comprising acrylic resin. Computer-driven plotters such as X-Y plotters are well

known in the art for applying ink in a prescribed pattern as shown for example by Kume et al. One of ordinary skill in the art at the time the invention was made would have readily appreciated applying the ink taught by Hirahara in a prescribed pattern using an X-Y plotter as was well known in the art as shown for example by Kume et al. as only the expected results would be achieved. Inks comprising acrylic resin are well known in the art as suitable for use in a hot stamping process as shown above by Kamen et al. Absent any unexpected results one of ordinary skill in the art at the time the invention was made reading Hirahara in view of Kamen et al. would have readily appreciated using as the ink taught by Hirahara an ink comprising acrylic resin as suggested by Kamen et al.

Kume et al. are directed to a process for applying ink to a substrate to form a label. Kume et al. teach applying the ink using computer-driven printers such as X-Y plotters, ink jet printers, etc. (Column 8, lines 30-36).

Kamen et al. are directed to a method for applying a decorative coating to a glass substrate. Kamen et al. teach a method comprising applying an ink in a prescribed pattern to the substrate, curing the adhesive ink, and applying a foil with a decorative metal film to the ink pattern at an elevated temperature sufficient to bond the film to the ink (Page 2, lines 32-37). Kamen et al. teach using an ink comprising acrylic resins (Page 2, lines 53-55).

Regarding claim 16, Hirahara are silent as to a specific teaching on the dimensions of the applied ink. However, the dimensions of the applied ink depend on the product made. One of ordinary skill in the art would be readily expected to determine the dimensions (height and width) of the applied ink without requiring any undue experimentation.

Regarding claim 17, Hirahara is silent as to a specific teaching on the hardness of the ink prior to applying the foil. It is noted Hirahara suggest curing the ink until the ink is tacky and not deformable by touch (Column 2, lines 6-10). One of ordinary skill in the art at the time the invention was made would have readily appreciated curing the ink to at least a tacky hardness (hardness greater than 65% on a 0-100% durometer scale) prior to applying the foil to ensure the ink does not move/deform during application of the foil.

Regarding claims 18 and 19, Kamen et al. teach applying the foil with a decorative metal film to the ink pattern at a temperature greater than 250 °F (Page 3, lines 30-33). Absent any unexpected results one of ordinary skill in the art at the time the invention was made reading Hirahara in view of Kamen et al. would have readily appreciated stamping the pattern to the ink as taught by Hirahara at a temperature greater than 250 °F as suggested by Kamen et al.

Conclusion

8. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Kuboyama (U.S. Patent 4,645,555) and Burzlaff et al. (U.S. Patent 4,484,970) teach known hot-stamping methods.

9. Any inquiry concerning this communication or earlier communications from the examiner should be directed to **John L. Goff** whose telephone number is **703-305-7481**. The examiner can normally be reached on M-Th (8 - 5) and alternate Fridays.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Michael Ball can be reached on 703-308-2058. The fax phone numbers for the

organization where this application or proceeding is assigned are 703-872-9310 for regular communications and 703-872-9311 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-308-0661.

John L. Goff
November 22, 2002

Michael W. Ball
Supervisory Patent Examiner
Technology Center 1700